State of Utah

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DEPARTMENT OF TRANSPORTATION

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October 5, 2006

Larry Crist, Acting Field Supervisor
U.S. Fish and Wildlife Service
2369 West Orton Circle
West Valley City, Utah 84119

RE: STP-0212(5)0E – Telegraph Street; Improvements, 500 West to 300 West, in Washington City, Washington County (PIN 4409)

Dear Larry:

The Utah Department of Transportation is proposing to make improvements to Telegraph Street, from 500 West to 300 West in Washington City, Washington County, Utah (see location map). This will include widening of the bridge that crosses Mill Creek. Some wetlands and riparian areas are likely to be affected.

URS Engineering is writing the environmental assessment for this project and has analyzed the potential acts to Federally-listed threatened, endangered, and candidate species in the project area. I am attaching their analysis for your information.

Based on URS's analysis, I agree with them that impacts are possible to southwestern willow flycatchers (*Empidonax traillii extimus*) and western yellow-billed cuckoos (*Coccyzus americanus occidentalis*). However, with the measures listed in the EA (shown in the attached text) I am confident that this project may affect but is not likely to adversely affect these species.

No other threatened, endangered, or candidate species should be affected by this project. We request your concurrence with this determination. If you have any questions, please call me at 965-4672, or email me at paulwest@utah.gov. Unless you have concerns of which we are not aware, we will proceed with this project. Thank you for your assistance.

☐ Concur No Effect

☑ Concur Not Likely to Adversely Affect

☐ No Comment

U.S.F.W.S. – Utah Field Supervisor

Date 10.11.06

Calvin Rampton Complex, 4501 South 2700 West, Salt Lake City, Utah 84119-5998
telephone 801-965-4000 • facsimile 801-965-4338 • www.udot.utah.gov

Sincerely,

Paul W. West

Paul W. West, Wildlife/Wetlands Biologist
UDOT Environmental Services

Encls.

cc: Betsy Skinner – UDOT Environmental
Greg Punske – FHWA
Randy Taylor – UDOT, Region 4
Andy Powell – URS Corporation
Valerie Waldorf – URS Corporation
Bruce Bonebrake – UDWR, Southern Region, Cedar City
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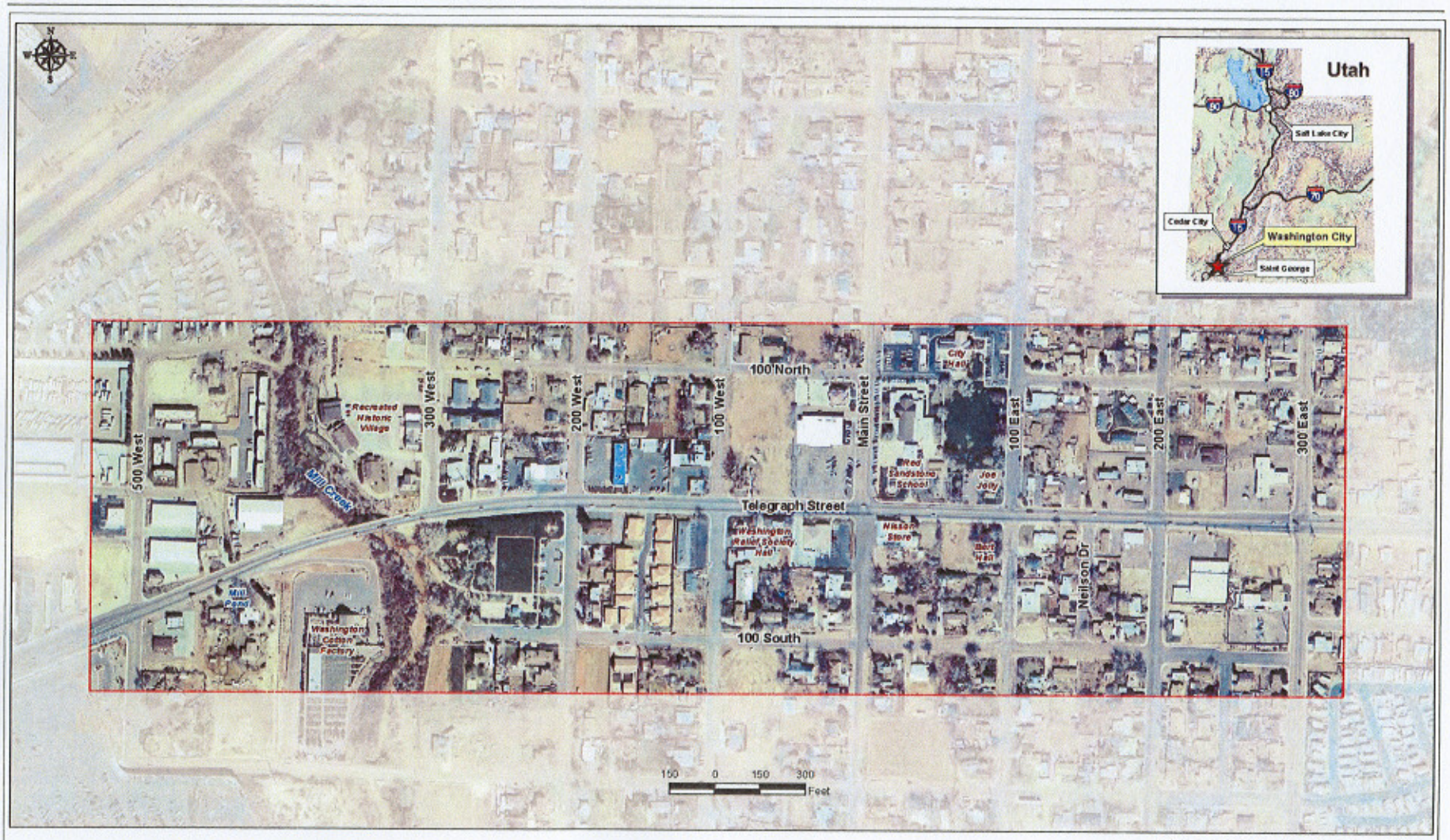

Figure 1.1 Study Area Map

3.15 Threatened and Endangered Species

3.15.1 Regulatory Setting, Studies and Coordination

Threatened and endangered species or "special status species" include federal- and state listed threatened, endangered, and candidate species, and Utah Division of Wildlife Resources (UDWR) listed species. Information on the biology, distribution, and listing history of each species was obtained from U.S. Fish and Wildlife Service (USFWS) Federal Register documents, field guides, Utah Natural Heritage Program's (UNHP) Biodiversity Tracking and Conservation System (BIOTICS), and communication with field experts at UDWR.

3.15.2 Affected Environment

Fifty (50) species are listed as special status in Washington County, Utah, including those listed as threatened or endangered under the Endangered Species Act (ESA), as well as Utah Species of Special Concern and species receiving special management in Utah. Utah species of special concern and species receiving special management in Utah are not protected under the ESA or Utah state laws but are still tracked by UNHP as rare or imperiled species.

Of the 50 species listed in the county, **Table 3.19** lists those with potential habitat in or near the study area. A more detailed description of each species known to occur or with potential to occur in the study area is included following the table. Those species included in the federal and state list for Washington County that are unlikely to or do not occur in the study area are not discussed further.

Table 3.19 Special Status Species Occurrence in the Telegraph Street Project Study Area

Common Name	Scientific Name	Status	Habitat	Occurrence in Project Area
Birds				
Bald eagle	*Haliaeetus leucocephalus*	FT	Breeding generally occurs within 2.5 miles of large lakes, reservoirs, and major rivers in which there are adequate prey, perching areas, and nesting sites.	Unlikely; no known roosting or nesting habitat in project area.
California condor	*Gymnogyps californianus*	FE	Mountainous country at low and moderate elevations, especially rocky and brushy areas near cliffs. Colonies roost in snags, tall open-branched trees, or cliffs, often near important foraging grounds.	Unlikely; habitat not suitable; may occasionally fly over but no important resources in project area.
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE	Obligate riparian nester, especially in areas of dense willow.	Potentially present; suitable habitat though none detected during 1998 to 2001 surveys conducted by UDWR.
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FC	Large tracts of cottonwood/willow riparian woodland with dense sub-canopies	Potentially present; suitable habitat though none detected during 1998 to 2001 surveys conducted by UDWR.
Ferruginous hawk	*Buteo regalis*	SPC	Nests in grassland or shrub areas with flat and rolling terrain. Winters	Unlikely; recent records of occurrence in vicinity.

			in open farmlands, grasslands, and deserts with abundant small mammal prey.	However, not preferred habitat due to urban development. No suitable nesting habitat is present in the project area.
Lewis's woodpecker	*Melanerpes lewis*	SPC	Primarily in ponderosa pine woodland but also in riparian woodland	Unlikely; suitable habitat but no known populations in Washington County.
Long-billed curlew	*Numenius americanus*	SPC	Short grass areas with bare ground	Unlikely; recent records of occurrence in vicinity, but no suitable habitat in project area.
Mammals				
Allen's big-eared bat	*Idionycteris phyllotis*	SPC	Riparian woodland and rocky scrubland; roosts in caves and rock crevices during the day.	Unlikely; may occur during foraging only.
Big free-tailed bat	*Nyctinomops macrotis*	SPC	Rocky and woodland habitats; roosts in caves, abandoned mines, buildings, and rock crevices. Has been captured in lowland riparian habitats.	Potentially present during foraging; rare in Utah but may be locally more common.
Fringed myotis	*Myotis thysanodes*	SPC	Variety of habitats, including mixed conifer, desert riparian, and pinyon-juniper in areas with rocky outcroppings, cliffs, and canyons. Inhabits caves, mines, and buildings, most often in desert and woodland areas.	Potentially present during foraging only.
Spotted bat	*Euderma maculatum*	SPC	Variety of habitats, ranging from deserts to forested mountains; they roost and hibernate in caves and rock crevices. Has been captured in lowland riparian in desert shrub community and occasionally found in or on buildings in urban areas.	Unlikely; though historic records of occurrence in area.
Western red bat	*Lasiurus blossevillii*	SPC	Forages in forested areas near water; daytime roosting usually occurs in trees. Reported in Utah from towns and cottonwood groves in lowland riparian areas.	Unlikely; Mill Creek is suitable foraging habitat but species very rare in Utah. Western red bat has not been recorded near the project area since 1983.
Amphibians				
Arizona toad	*Bufo microscaphus*	SPC	Juniper-dominated habitats and low-elevation riparian habitat, generally in association with permanent or semi-permanent water bodies in streams, washes, irrigated croplands, reservoirs, and uplands adjacent to water.	Likely present; historic records of occurrence in project area and suitable habitat is present.

Reptiles				
Western banded gecko	*Coleonyx variegatus*	SPC	Variety of habitat types	Potentially present; records of occurrence within 0.5 mile of project area; suitable habitat.
Western threadsnake	*Leptotyphlops humilis*	SPC	Sandy areas, alluvial deposits, and other areas with loose soils. Records in Washington County from irrigated fields	Potentially present along Mill Creek or fields.
Fish				
Desert sucker	*Catostomus clarki*	SPC	Benthic (bottom dwelling) that occurs primarily in streams, where spawning occurs in riffles during the winter and spring.	Potentially present; records of occurrence within 0.5 mile. Occurs downstream in the Virgin River and may occasionally occur in Mill Creek.
Flannelmouth sucker	*Catostomus latipinnis*	CS	Prefer large rivers, where they are often found in deep pools of slow-flowing, low gradient reaches.	Unlikely; occurs downstream in the Virgin River and may occasionally occur in Mill Creek, though the habitat in project area is not considered suitable.
Virgin spinedace	*Lepidomeda mollispinis*	SPC	Occurs in both the main stem Virgin River and tributary reaches, particularly in areas with swift runs interspersed with shaded pools. Clear, slow-moving water of creeks and small streams, and are usually found in areas with abundant cover.	Unlikely; occurs downstream in the Virgin River and may occasionally occur in Mill Creek though the habitat in project area is not considered suitable.
Invertebrates				
Desert springsnail	*Pyrgulopsis deserta*	SPC	Known from six springs in Washington County.	Potentially present; historical records of occurrence within 0.5 mile of project area.

Sources: Utah Department of Natural Resources, 2006 and URS, 2006
FE = Federally-listed as endangered under the Endangered Species Act.
FT = Federally-listed as threatened under the Endangered Species Act.
FC = Federal candidate for listing under the Endangered Species Act.
SPC= State of Utah wildlife species of concern; CS= Species receiving special management in the state of Utah.

As shown in **Table 3.19**, the following species potentially occur in the study area based on presence of suitable habitat and/or records of occurrence.

Southwestern Willow Flycatcher

Southwestern willow flycatchers are rare in Utah. The subspecies nests in dense riparian vegetation, typically consisting of stands of willows (*Salix* sp.) with a cottonwood (*Populus* sp.) gallery forest overstory. The subspecies rarely nests where nonnative salt cedar (*Tamarix* sp.) and Russian olive (*Elaeagnus angustifolia*) trees are interspersed with native willows (McDonald et al. 1997). Previous surveys conducted in 1998 through 2001 did not locate nesting southwestern willow flycatchers along Mill Creek in the

study area, however, nesting pairs occur downstream of the study area along the Virgin River, approximately 0.5 mile to the southeast (Day 2006). However, the riparian habitat along Mill Creek in the study area is suitable habitat during migration, and the subspecies could be present during migration stopovers between April and June or September through October.

Western Yellow-billed Cuckoo

In the desert southwest, yellow-billed cuckoos nest in open riparian woodlands with an understory of dense vegetation. They also occasionally nest in orchards and other riparian-associated woodlands. Willow, cottonwood, and mesquite (*Prosopis* spp.) are preferred nesting trees, but they will also utilize orchards (Wiggins 2005). The presence of non-native salt cedar has reduced habitat suitability for yellow-billed cuckoos in the west. Though few historical breeding records exist from Utah, recent survey efforts found low numbers of breeding pairs at scattered locations, at least in non-drought years (Wiggins 2005). No yellow-billed cuckoos were found at Mill Creek during 1998 through 2001 surveys conducted by UDWR (Day 2006). The riparian woodland at Mill Creek is suitable habitat for yellow-billed cuckoos and the species may occur during migration or nesting.

Big Free-tailed Bat

Populations of big-free tailed bat in Utah occur in scattered locations across the southern half of the state, with the majority of records from the Colorado Plateau and Mojave Desert regions in association with desert scrub and desert riparian habitat types. Salt cedar dominates the riparian habitat used by big-free tailed bats. Preferred roosts are crevices and cavities in cliff faces, but no information concerning locations of known roost sites are available for Utah (UDWR 2006). Big free-tailed bats may occur during foraging but no roosting habitat is present in the study area.

Fringed Myotis

Fringed myotis occupy a variety of habitats, but the most common habitats for this bat are dry, open areas (grasslands and deserts) interspersed with oak, pinyon-juniper woodlands, or ponderosa pine forest with abundant snags and rocky outcroppings, cliffs, and canyons (Keinath 2004). In southern Utah, riparian habitats comprised 20 % of captures (Adams 2003). Therefore, fringed myotis may occur in the Mill Creek corridor during foraging only.

Arizona Toad

In Utah, Arizona toads only occur in the southwestern portion of the state where the species inhabits streams, washes, irrigated cropland, reservoirs, and uplands adjacent to water. The toad is inactive in cold weather. Adults are primarily nocturnal and newly metamorphosed young are active during the day. Arizona toads lays eggs on bottoms of shallow, slow-moving streams. Mill Creek is suitable habitat for Arizona toad and the species is likely to be present in the study area.

Western Banded Gecko

Western banded geckos occur in southwestern Washington County in desert scrub habitat and sandy flats and washes of the lower elevations of Zion's canyon lands. Because it is nocturnal and somewhat secretive, the species is rarely encountered, but it may be more common in Utah than records indicate, though no data are available to suggest population size or trends. However, populations may be threatened by habitat loss associated with urban expansion and development that is pervasive in this region of the state. The species may occur in the Mill Creek area.

Western Threadsnake

The nocturnal western threadsnake burrows in moist loose soil. Records of the species in Utah are only from Washington County. Western threadsnake may occur along the riparian habitat at Mill Creek or other areas with irrigated soil (Wheeler 2006).

Desert Sucker

Desert suckers occur in the main stem Virgin River and its tributaries in Washington County. Typical habitat is small to moderately large streams with pools and riffles. Young and small fish occupy riffle areas, while large adults inhabit pools during daytime and move to riffles and rapids at night in periods of high turbidity. This species may occur in Mill Creek.

Desert Springsnail

Known habitat requirements of desert springsnail are from springs. Several springs are located in the vicinity of Washington City. The current status of the species in the study area is unknown, though desert springsnail has potential to occur in Mill Creek.

3.15.3 Impacts

The potential impacts to special status species (including threatened or endangered species) as a result of implementation of the roadway improvements are discussed in this section. Impacts were assessed using the same methods described in Section 3.14.3, Wildlife Impacts, for those special status species potentially occurring in the study area (as described in Section 3.14.2 Wildlife). The individual species are discussed under each alternative.

No Build Alternative Impacts

Under the no build alternative, no impacts resulting from this project would adversely affect special status species in the study area.

Build Alternative Impacts

The impacts to special status species, as a result of the build alternatives, are all the same as those discussed below for Alternative One.

Alternative One

As discussed in Section 3.14.2 Wildlife, Alternative One would result in the permanent disturbance of 0.01 acre of wetlands and 0.04 acre of riparian woodland. The following text summarizes the impacts to special status species as a result of implementing Alternative One.

Southwestern Willow Flycatcher and Western Yellow-Billed Cuckoo

The Mill Creek corridor contains suitable nesting and foraging habitat for the southwestern willow flycatcher and western yellow-billed cuckoo. There is a possibility that the birds could occur during the nesting season or during migration, and that the project could cause a minor loss of habitat and displacement that could affect either or both species.

Big Free-Tailed Bat and Fringed Myotis

The Mill Creek corridor contains suitable foraging habitat for the big free-tailed bat and fringed myotis. Since bat foraging occurs in the evening or early morning hours, the project is unlikely to have an adverse affect on either species.

Arizona Toad, Western Banded Gecko, and Western Threadsnake

The Mill Creek corridor contains suitable habitat for the Arizona toad, western banded gecko, and western threadsnake. Although there is the possibility that these species could be affected by direct mortality, displacement and minor habitat loss, due to their mobility, the relatively small area of impact, and remaining areas of useable habitat in adjacent areas, adverse impacts to their populations are unlikely.

Desert Sucker

The desert sucker is known to occur nearby in the Virgin River and although the habitat is marginal in the study area, occurrence in Mill Creek is possible. Since the project will not involve the placement of piers or other structures in Mill Creek, and BMPs will be implemented during construction to minimize sedimentation, the sucker is unlikely to be adversely affected.

Desert Springsnail

Little is known about the distribution of the desert springsnail in southern Utah and although it is only known from six springs in Washington County, it could occur along Mill Creek. However, due to the lack of actual springs in the impact area the relatively small area of riparian and wetland habitat impacted, the project is unlikely to adversely affect the species.

3.15.4 Avoidance, Minimization and/or Mitigation Measures

In order to avoid and minimize impacts to special status species, the following mitigation measures will be implemented:

Southwestern Willow Flycatcher and Western Yellow-Billed Cuckoo

- The USFWS will be consulted to confirm mitigation requirements.
- No vegetation will be cleared along Mill Creek between April 1 and October 31 unless presence/absence surveys are conducted for the southwestern willow flycatcher and western yellow-billed cuckoo.
- Areas of riparian and wetland habitat removed for construction will be replaced or enhanced at an equivalent acreage to compensate for the effects of habitat loss. Habitat replacement or enhancement would consist of planting of native trees and shrubs, controlling noxious weeds, or seeding native species in the vicinity of the project. Habitat enhancement would be accomplished within the study area, ideally along Mill Creek. *Arizona Toad, Western Banded Gecko, Western Threadsnake, and Desert Springsnail*

- During construction, vehicle operation will be restricted to the designated construction area, which will be fenced or clearly flagged. Construction limits will be fenced with silt-type fencing where adjacent to sensitive habitats such as riparian woodland or wetland habitats.
- If any toads are observed during construction, they will be removed (by hand) and placed along the Mill Creek corridor outside the work area.

Desert Sucker

- Best Management Practices (BMPs) will be used during all phases of construction to reduce impacts from sedimentation and erosion, including the use of berms, brush barriers, check dams, erosion control blankets, filter strips, sandbag barriers, sediment basins, silt fences, straw-bale barriers, surface roughening, and/or diversion channels.
- See other mitigation measures listed in Section 3.12.4 Wetland Mitigation.